

CLAIMS

1. Use of a pharmaceutically acceptable agent being able to acidify the cell cytoplasm, for the manufacture of a pharmaceutical composition useful for preventing or halting cellular proliferation in a person or an animal, wherein an effective amount of said agent is administered in an essentially non-dissociated form to the person or animal.
2. The use according to claim 1 wherein the agent is an agent having its dissociation constant in the range 5.0 to 7.4, preferably in the range 6.0 to 7.3; most preferably about 7.0.
3. The use according to claim 1 or 2, wherein said agent is urocanic acid.
4. The use according to claim 3, wherein said agent is *trans*-urocanic acid.
5. The use according to claim 3, wherein said agent is *cis*-urocanic acid.
6. The use according to any of the claims 1 to 5 for treatment or prevention of a disease or disorder curable by intracellular acidification inducing the inhibition or halting of cell proliferation.
7. The use according to claim 6 wherein the disease or disorder is a local or systemic, non-transformed or transformed hyperproliferative disease.
8. The use according to claim 7 wherein the disease or disorder is a local or systemic cancer selected from brain, lung, skin, bladder, gastric, pancreatic, breast, head, neck, kidney, ovarian, prostate, colorectal, oesophageal, gynaecological and thyroid cancer.
9. The use according to any of the foregoing claims wherein the agent is administered systemically or locally, preferably locally, most preferably topically.
10. Use of a pharmaceutically acceptable agent as defined in any of the claims 1 to 5, as an enhancer for another therapeutically active agent.

11. Pharmaceutical composition comprising as active agent a pharmaceutically acceptable agent being able to acidify the cell cytoplasm, in combination with a pharmaceutically acceptable carrier, which carrier essentially prevents the agent from dissociating at extracellular pH values.

5

12. The composition according to claim 11 wherein said agent is an agent having its dissociation constant in the range 5.0 to 7.4, preferably in the range 6.0 to 7.3; most preferably about 7.0.

10

13. The composition according to claim 11 or 12, wherein said agent is *trans*-urocanic acid.

14. The composition according to claim 11 or 12, wherein said agent is *cis*-urocanic acid.

15

15. The composition according to any of the claims 11 to 14, wherein said composition additionally comprises another therapeutically active agent, preferably an anti-proliferative or anticancer agent.